

## IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An apparatus for analyzing the kinematics of golf equipment, comprising:

a camera system including a filter;

a first strobe lamp;

a second strobe lamp configured and adapted to provide a limited wavelength of light;

wherein the second strobe lamp is positioned off axis from the axis of the camera system;

a club having one or more selectively positioned markers; and

a ball having one or more selectively positioned markers;

wherein the system is operable to differentiate between the club markers and the ball markers.

2. (Original) The apparatus according to claim 1, wherein said camera filter allows light between about 590 and about 610 nm to pass.

3. (Currently Amended) The apparatus according to claim 1, wherein said second strobe lamp is positioned off axis from the axis of the camera by between about 10 and about 20 degrees.

4. (Original) The apparatus according to claim 1, wherein said markers positioned on said club are retroreflective and said markers positioned on said ball are fluorescent.

5. (Original) The apparatus according to claim 1, wherein said second strobe lamp is filtered to achieve a limited wavelength of light.

6. (Original) The apparatus according to claim 1, wherein said second strobe lamp is a limited wavelength light source.

7. (Original) The apparatus according to claim 6, wherein said limited wavelength light source is an LED.

8. (Original) The apparatus according to claim 5, wherein said filter passes light with wavelengths between about 590 and about 610 nm.

9. (Original) The apparatus according to claim 1, wherein said first strobe is filtered to pass light between about 590 and about 610 nm and between about 460 and about 480 nm.

10. (Currently Amended) An apparatus for analyzing the kinematics of golf equipment, comprising:

a camera system including a filter;

a first strobe lamp;

a second strobe lamp;

wherein the second strobe lamp is positioned off axis from the axis of the camera system;

a club having one or more selectively positioned markers;

a ball having one or more selectively positioned markers; and

wherein the camera system is configured and positioned to receive light sufficient to image the club and the ball markers when illuminated by the first strobe lamp, and wherein the camera system is configured and positioned to only receive light sufficient to image the ball markers when illuminated by the second strobe lamp.

11. (Original) The apparatus according to claim 10, wherein said camera filter allows light between about 590 and about 610 nm to pass.

12. (Currently Amended) The apparatus according to claim 10, wherein said the axis angle of the second strobe lamp is off from the axis angle of the camera system by ~~is between~~ about 10 and about 20 degrees.

13. (Original) The apparatus according to claim 10, wherein said the axis angle of the second strobe lamp is off from the axis angle of the camera system by ~~is between~~ about 20 and about 30 degrees.

14. (Original) The apparatus according to claim 10, wherein said markers positioned on said club are retroreflective and said markers positioned on said ball are fluorescent.
15. (Original) The apparatus according to claim 10, wherein said second strobe is configured and adapted to provide a limited wavelength of light.
16. (Original) The apparatus according to claim 10, wherein said first strobe is filtered to pass light between about 590 and about 610 nm and between about 460 and about 480 nm.
17. (Currently Amended) An apparatus for analyzing the kinematics of golf equipment, comprising:  
a camera system including a filter;  
a first strobe lamp;  
a second strobe lamp;  
wherein the second strobe lamp is positioned off axis from the axis of the camera system;  
a club having one or more selectively positioned retroreflective markers; and  
a ball having one or more selectively positioned fluorescent markers.
18. (Currently Amended) The apparatus according to claim 17, wherein said second strobe is off axis from an axis of the camera system by about 10 and about 20 degrees.
19. (Original) The apparatus according to claim 17, wherein said second strobe is configured and adapted to provide a limited wavelength.
20. (Original) The apparatus according to claim 18, wherein said off axis angle is between about 10 and about 20 degrees.
21. (Original) The apparatus according to claim 18, wherein said off axis angle is between about 20 and about 30 degrees.

22. (Original) The apparatus according to claim 17, wherein said camera system comprises at least one electronic sensor.
23. (Original) The apparatus according to claim 22, wherein said electronic sensor is a CCD.
24. (Currently Amended) An apparatus for analyzing the kinematics of golf equipment, comprising:
- a camera system including a filter;
  - a first strobe lamp configured and adapted to selectively provide at least a first spectrum of light and a second spectrum of light;
  - a second strobe lamp positioned off axis from the axis of the camera system;
  - a club having one or more selectively positioned markers;
  - a ball having one or more selectively positioned markers; and
  - wherein the camera system is configured and positioned to receive light sufficient to image the club and the ball markers when illuminated by the first spectrum of light, and wherein the camera system is configured and positioned to only receive light sufficient to image the ball markers when illuminated by the second spectrum of light.
25. (Original) The apparatus according to claim 24, wherein the first spectrum of light comprises at least a first and second wavelength of light.
26. (Original) The apparatus according to claim 25, wherein the second spectrum of light the second wavelength of light.
27. (Original) The apparatus according to claim 24, wherein the first and second spectrum of light are provided by a limited wavelength light source.
28. (Original) The apparatus according to claim 27, wherein the limited wavelength light source comprises a plurality of LED's.

29. (Original) The apparatus according to claim 28, wherein the plurality of LED's comprises one of:

100 or more LED's;

200 or more LED's; and

300 or more LED's.